



Application Number

IDS Flag Clearance for Application 10541036



Content	Mailroom Date	Entry Number	IDS Review	Last Modified	Reviewer
EIDS.	2006-03-30	15	Y <input checked="" type="checkbox"/>	2006-09-29 15:47:07.0	CNguyen1
<input type="button" value="Update"/>					

10/541,036

A

## Refine Search

Your wildcard search against 10000 terms has yielded the results below.

*Your result set for the last L# is incomplete.*

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

### Search Results -

Terms	Documents
L12 and (simulat\$ same sens\$)	0

**Database:** US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

**Search:** L13

### Search History

**DATE:** Friday, September 29, 2006    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

<u>Set</u>	<u>Name</u>	<u>Query</u>	<u>Hit</u>	<u>Set</u>
			Count	Name result set
	side by side			
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR	L13 and (simulat\$ same sens\$)	0	<u>L13</u>
		L12 and (control\$ same (vessel\$ or ship\$ or boat\$))	1	<u>L12</u>
		L11 16 or l7 or l10	107	<u>L11</u>
	DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR			
	L10	(5003477   4796206   4300205   5077670   4862371   4757463   5041976)![PN]	7	<u>L10</u>
	L9	("5214582")![PN]	1	<u>L9</u>
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR			
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*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*  
L7 ("5214582")[URPN] 99 L7

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES;*  
*OP=OR*

L6 L3 1 L6

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

L5 L3 and roll\$ 0 L5

L4 L3 and angle\$ 1 L4

L3 5214582.pn. 1 L3

*DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR*

L2 L1 and angle\$ 1 L2

L1 20060116796 1 L1

END OF SEARCH HISTORY

## Refine Search

### Search Results -

Terms	Documents
L3 and roll\$	0

**Database:** US Pre-Grant Publication Full-Text Database  
US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Search:** L5    

  

### Search History

DATE: Friday, September 29, 2006 [Purge Queries](#) [Printable Copy](#) [Create Case](#)

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>			
<u>L5</u>	L3 and roll\$	0	<u>L5</u>
<u>L4</u>	L3 and angle\$	1	<u>L4</u>
<u>L3</u>	5214582.pn.	1	<u>L3</u>
<i>DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR</i>			
<u>L2</u>	L1 and angle\$	1	<u>L2</u>
<u>L1</u>	20060116796	1	<u>L1</u>

END OF SEARCH HISTORY

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)**End of Result Set** [Generate Collection](#) [Print](#)

L12: Entry 1 of 1

File: USPT

Jan 25, 2005

US-PAT-NO: 6847872

DOCUMENT-IDENTIFIER: US 6847872 B2

TITLE: Supplemental diagnostic and services resource planning for mobile systems

DATE-ISSUED: January 25, 2005

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bodin; William Kress	Austin	TX		
Thorson; Derral C.	Austin	TX		

**ASSIGNEE-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
International Business Machines Corporation	Armonk	NY			02	

APPL-NO: 10/290399 [PALM]

DATE FILED: November 7, 2002

**PARENT-CASE:**

CROSS-REFERENCE TO RELATED APPLICATIONS (CLAIMING BENEFIT UNDER 35 U.S.C. 120) This application is related to U.S. patent application Ser. No. 10/232,246, docket number AUS920020344US1, filed on Aug. 29, 2002, by William Kress Bodin, et al.

INT-CL-ISSUED: [07] G05B 13/02

**INT-CL-CURRENT:**

TYPE	IPC	DATE
CIPS	G 1/123	20060101
CIPS	G 06 Q 10/00	20060101
CIPS	G 07 C 5/00	20060101

US-CL-ISSUED: 701/33; 701/29, 701/30, 701/31, 701/32, 701/36, 701/114, 340/438, 340/439, 702/182, 702/183, 702/185

US-CL-CURRENT: 701/33; 340/438, 340/439, 701/114, 701/29, 701/30, 701/31, 701/32, 701/36, 702/182, 702/183, 702/185

FIELD-OF-CLASSIFICATION-SEARCH: 701/1, 701/2, 701/36, 701/29, 701/30, 701/33, 701/31, 701/32, 701/14, 340/438, 340/439, 379/127.01, 702/185, 702/183, 702/182, 73/117.3

See application file for complete search history.

PRIOR-ART-DISCLOSED:

## U. S. PATENT DOCUMENTS

  

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <a href="#"><u>5210789</u></a>	May 1993	Jeffus et al.	379/127.01
<input type="checkbox"/> <a href="#"><u>5214582</u></a>	May 1993	Gray	701/33
<input type="checkbox"/> <a href="#"><u>5442553</u></a>	August 1995	Parrillo	455/420
<input type="checkbox"/> <a href="#"><u>5815071</u></a>	September 1998	Doyle	340/439
<input type="checkbox"/> <a href="#"><u>5922037</u></a>	July 1999	Potts	701/29
<input type="checkbox"/> <a href="#"><u>6094609</u></a>	July 2000	Arjomand	701/29
<input type="checkbox"/> <a href="#"><u>6285931</u></a>	September 2001	Hattori et al.	701/29
<input type="checkbox"/> <a href="#"><u>6292724</u></a>	September 2001	Apsell et al.	701/29
<input type="checkbox"/> <a href="#"><u>6339736</u></a>	January 2002	Moskowitz et al.	701/29
<input type="checkbox"/> <a href="#"><u>6370454</u></a>	April 2002	Moore	701/29
<input type="checkbox"/> <a href="#"><u>6529808</u></a>	March 2003	Diem	701/29
<input type="checkbox"/> <a href="#"><u>6640166</u></a>	October 2003	Liebl et al.	701/29
<input type="checkbox"/> <a href="#"><u>6647328</u></a>	November 2003	Walker	701/36
<input type="checkbox"/> <a href="#"><u>2001/0037168</u></a>	November 2001	Hozuka	701/29
<input type="checkbox"/> <a href="#"><u>2001/0056544</u></a>	December 2001	Walker	713/200
<input type="checkbox"/> <a href="#"><u>2002/0045976</u></a>	April 2002	Kodama	701/29
<input type="checkbox"/> <a href="#"><u>2002/0077780</u></a>	June 2002	Liebl et al.	702/183
<input type="checkbox"/> <a href="#"><u>2002/0077781</u></a>	June 2002	Liebl et al.	702/183
<input type="checkbox"/> <a href="#"><u>2003/0093187</u></a>	May 2003	Walker	701/1

## OTHER PUBLICATIONS

"Information Everywhere: New Opportunities for Pervasive Technology", IBM Corp., Mar. 2000, 8 pages.

ART-UNIT: 3661

PRIMARY-EXAMINER: Chin; Gary

ASSISTANT-EXAMINER: Marc; McDieunel

ATTY-AGENT-FIRM: Frantz; Robert H. Walker; Mark S. Byrd; Cynthia

ABSTRACT:

Diagnostic codes from a vehicle or other system in transit are transmitted to an opportunity server, which forwards the codes to a supplemental diagnostic service provider. The diagnostic service provider determines if supplemental diagnostics software functions are available, and if so, downloads them to the vehicle. After

executing the supplemental diagnostics, the vehicle reports updated codes to the opportunity server. Multiple cycles of selection, downloading and execution of supplemental diagnostics may be performed until fault isolation is achieved, following which the opportunity server issues requests for bids to potential repair service providers. Responding offers are received, coalesced and presented to the operator. The operator of the vehicle is presented with one or more coalesced offers, upon selection of which, a service is scheduled.

15 Claims, 4 Drawing figures

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[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)**End of Result Set** [Generate Collection](#) [Print](#)

L2: Entry 1 of 1

File: USPT

Jan 25, 2005

**Bodin → no sim.**

DOCUMENT-IDENTIFIER: US 6847872 B2

TITLE: Supplemental diagnostic and services resource planning for mobile systems

Brief Summary Text (9):

This invention relates to the technologies of automated and preemptive service determination, brokering and scheduling for moving systems such as automobiles, trains, trucks, ships, and aircraft. The invention relates more particularly to systems for remotely providing enhanced and supplemental diagnostics, and subsequently performing enhanced materials and resource planning based upon such results.

Detailed Description Text (30):

The enhanced ECM (20) is also provided with location means, such as a GPS receiver or LBS-enabled wireless interface (25, 26), as well as a real-time clock (200). The location of the vehicle at the time of the detected event is recorded either with each DTC or in a separate DTC associated with the first DTC. Contact is then initiated through a wireless network interface (28, 29), such as a PCS interface, to the remote opportunity server, and the DTC's are transmitted or uploaded to the server.

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

10/541,036

## Refine Search

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### Search Results -

Terms	Documents
L16 and (simulat\$ with sens\$ with (data or signal))	0

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**Database:**

- US Pre-Grant Publication Full-Text Database
- US Patents Full-Text Database
- US OCR Full-Text Database
- EPO Abstracts Database
- JPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

**Search:**

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### Search History

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DATE: Friday, September 29, 2006 [Purge Queries](#) [Printable Copy](#) [Create Case](#)

<u>Set</u>	<u>Name</u>	<u>Query</u>	<u>Hit</u>	<u>Set</u>
			<u>Count</u>	<u>Name</u>
side by side				result set
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<u>L19</u>	L16 and (simulat\$ with sens\$ with (data or signal))		0	<u>L19</u>
<u>L18</u>	L16 and (simulat\$ with sens\$ wit (data or signal))		4	<u>L18</u>
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<u>L17</u>	L16 and (simulat\$ with sens\$)		54	<u>L17</u>
<u>L16</u>	(control\$ same (vessel\$ or ship\$ or boat\$)) and (roll\$ and pitch\$ and sens\$ and angle\$)		1838	<u>L16</u>
<u>L15</u>	L14 and (roll\$ and pitch\$ and sens\$ and angle\$)		13	<u>L15</u>
<u>L14</u>	701/21.ccls.		216	<u>L14</u>
<u>L13</u>	L12 and (simulat\$ same sens\$)		0	<u>L13</u>
<u>L12</u>	L11 and (control\$ same (vessel\$ or ship\$ or boat\$))		1	<u>L12</u>
<u>L11</u>	L6 or L7 or L10		107	<u>L11</u>

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

L10 (5003477 | 4796206 | 4300205 | 5077670 | 4862371 | 4757463 | 5041976)![PN] 7 L10

L9 ("5214582")![PN] 1 L9

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L8 L3 1 L8

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

L7 ("5214582")![URPN] 99 L7

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR*

L6 L3 1 L6

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

L5 L3 and roll\$ 0 L5

L4 L3 and angle\$ 1 L4

L3 5214582.bn. 1 L3

*DB=PGPB; THES=ASSIGNEE; PLUR=YES; OP=OR*

L2 L1 and angle\$ 1 L2

L1 20060116796 1 L1

END OF SEARCH HISTORY

## Hit List

First Hit Your wildcard search against 10000 terms has yielded the results below.

*Your result set for the last L# is incomplete.*

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.



### Search Results - Record(s) 1 through 10 of 13 returned.

1. Document ID: US 20060064211 A1

L15: Entry 1 of 13

File: PGPB

Mar 23, 2006

PGPUB-DOCUMENT-NUMBER: 20060064211

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060064211 A1

TITLE: Method for testing of a combined dynamic positioning and power management system

PUBLICATION-DATE: March 23, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Johansen; Tor Arne	Vikhamar		NO
Sorensen; Asgeir Johan	Flatasen		NO
Skjetne; Roger	Trondheim		NO

US-CL-CURRENT: 701/21

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [KOMC](#) [Drawn D](#)

2. Document ID: US 20040073343 A1

L15: Entry 2 of 13

File: PGPB

Apr 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040073343

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040073343 A1

TITLE: Nonlinear active control of dynamical systems

PUBLICATION-DATE: April 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Nayfeh, Ali Hasan	Blacksburg	VA	US

Mook, Dean Trischler	Blacksburg	VA	US
Henry, Ryan James	Annapolis	MD	US
Masoud, Zivad Navif	Blacksburg	VA	US

US-CL-CURRENT: 701/21

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)

3. Document ID: US 20040015277 A1

L15: Entry 3 of 13

File: PGPB

Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040015277  
 PGPUB-FILING-TYPE: new  
 DOCUMENT-IDENTIFIER: US 20040015277 A1

TITLE: Autonomous surface watercraft

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Cardoza, Miguel A.	Round Rock	TX	US
Benedict, Sarah	Austin	TX	US
Mayoral, Anne	Austin	TX	US
Bennett, Matthew	Austin	TX	US
Hughes, J. Clark	Austin	TX	US
Tucker, Donald	Austin	TX	US

US-CL-CURRENT: 701/21; 114/144A

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)

4. Document ID: US 20030191562 A1

L15: Entry 4 of 13

File: PGPB

Oct 9, 2003

PGPUB-DOCUMENT-NUMBER: 20030191562  
 PGPUB-FILING-TYPE: new  
 DOCUMENT-IDENTIFIER: US 20030191562 A1

TITLE: Boat positioning and anchoring system

PUBLICATION-DATE: October 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Robertson, Glen E.	Sarasota	FL	US
Webster, John L.	Huntsville	AL	US

US-CL-CURRENT: 701/21; 114/144B, 701/213[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#) 5. Document ID: US 20020161491 A1

L15: Entry 5 of 13

File: PGPB

Oct 31, 2002

PGPUB-DOCUMENT-NUMBER: 20020161491

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020161491 A1

TITLE: METHOD FOR CONTROLLING LATERAL POSITION OF AN UNDERWATER TOWED BODY

PUBLICATION-DATE: October 31, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Crane, Jan W.	Panama City	FL	US
Rodriguez, Rafael R.	Panama City	FL	US

US-CL-CURRENT: 701/21[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#) 6. Document ID: US 6678589 B2

L15: Entry 6 of 13

File: USPT

Jan 13, 2004

US-PAT-NO: 6678589

DOCUMENT-IDENTIFIER: US 6678589 B2

TITLE: Boat positioning and anchoring system

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#) 7. Document ID: US 6611737 B1

L15: Entry 7 of 13

File: USPT

Aug 26, 2003

US-PAT-NO: 6611737

DOCUMENT-IDENTIFIER: US 6611737 B1

TITLE: Advanced ship autopilot system

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#) 8. Document ID: US 6470246 B1

L15: Entry 8 of 13

File: USPT

Oct 22, 2002

US-PAT-NO: 6470246

DOCUMENT-IDENTIFIER: US 6470246 B1

TITLE: Method for controlling lateral position of an underwater towed body

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Search](#) [Search](#) [Claims](#) [KMC](#) [Draw](#) 9. Document ID: US 6459990 B1

L15: Entry 9 of 13

File: USPT

Oct 1, 2002

US-PAT-NO: 6459990

DOCUMENT-IDENTIFIER: US 6459990 B1

TITLE: Self-contained positioning method and system thereof for water and land vehicles

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Search](#) [Search](#) [Claims](#) [KMC](#) [Draw](#) 10. Document ID: US 5406488 A

L15: Entry 10 of 13

File: USPT

Apr 11, 1995

US-PAT-NO: 5406488

DOCUMENT-IDENTIFIER: US 5406488 A

TITLE: Correction of errors in autopilots

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Search](#) [Search](#) [Claims](#) [KMC](#) [Draw](#)[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#) [Generate OACS](#)

Terms	Documents
L14 and (roll\$ and pitch\$ and sens\$ and angle\$)	13

Display Format: [-] [Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)

## Hit List

First Hit Your wildcard search against 10000 terms has yielded the results below.

*Your result set for the last L# is incomplete.*

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

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11. Document ID: US 4524710 A

L15: Entry 11 of 13

File: USPT

Jun 25, 1985

US-PAT-NO: 4524710

DOCUMENT-IDENTIFIER: US 4524710 A

TITLE: Automatic trim system for hydrofoil craft

<input type="button" value="Full"/>	<input type="button" value="Title"/>	<input type="button" value="Citation"/>	<input type="button" value="Front"/>	<input type="button" value="Review"/>	<input type="button" value="Classification"/>	<input type="button" value="Date"/>	<input type="button" value="Reference"/>	<input type="button" value="Sequenced"/>	<input type="button" value="Attachments"/>	<input type="button" value="Claims"/>	<input type="button" value="KMC"/>	<input type="button" value="Drawn D..."/>
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12. Document ID: US 4159690 A

L15: Entry 12 of 13

File: USPT

Jul 3, 1979

US-PAT-NO: 4159690

DOCUMENT-IDENTIFIER: US 4159690 A

TITLE: Automatic landing system for hydrofoil craft

<input type="button" value="Full"/>	<input type="button" value="Title"/>	<input type="button" value="Citation"/>	<input type="button" value="Front"/>	<input type="button" value="Review"/>	<input type="button" value="Classification"/>	<input type="button" value="Date"/>	<input type="button" value="Reference"/>	<input type="button" value="Sequenced"/>	<input type="button" value="Attachments"/>	<input type="button" value="Claims"/>	<input type="button" value="KMC"/>	<input type="button" value="Drawn D..."/>
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13. Document ID: US 4069784 A

L15: Entry 13 of 13

File: USPT

Jan 24, 1978

US-PAT-NO: 4069784

DOCUMENT-IDENTIFIER: US 4069784 A

TITLE: Method and device for producing substantially kinematic steering of a vessel

<input type="button" value="Full"/>	<input type="button" value="Title"/>	<input type="button" value="Citation"/>	<input type="button" value="Front"/>	<input type="button" value="Review"/>	<input type="button" value="Classification"/>	<input type="button" value="Date"/>	<input type="button" value="Reference"/>	<input type="button" value="Sequenced"/>	<input type="button" value="Attachments"/>	<input type="button" value="Claims"/>	<input type="button" value="KMC"/>	<input type="button" value="Drawn D..."/>
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Terms	Documents
L14 and (roll\$ and pitch\$ and sens\$ and angle\$)	13

**Display Format:**

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[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#) [Generate Collection](#) [Print](#)

L18: Entry 1 of 4

File: TDBD

Nov 1, 1994

TDB-ACC-NO: NN9411499

DISCLOSURE TITLE: Attitude Sensing and Control for Helicopters

PUBLICATION-DATA:

IBM Technical Disclosure Bulletin, November 1994, US

VOLUME NUMBER: 37

ISSUE NUMBER: 11

PAGE NUMBER: 499 - 502

PUBLICATION-DATE: November 1, 1994 (19941101)

CROSS REFERENCE: 0018-8689-37-11-499

DISCLOSURE TEXT:

This document contains drawings, formulas, and/or symbols that will not appear on line. Request hardcopy from ITIRC for complete article. Landing a helicopter in a confined space is a difficult task for a pilot. It is further compounded when the landing surface is moving in an undefined and variable manner, as when landing on the deck of a ship, for example. For accurate control of the helicopter during descent the pilot needs to know the height and attitude of the deck relative to his aircraft. The height is usually given to him by dual redundant radio altimeters, but these are not sufficiently accurate in the later stages of descent (below 10 metres). More importantly they also do not give an indication of relative attitude (roll) to the landing surface. The relative attitude of the deck is not available visually because of the pilot's field of view when he is in position for descent. Generally a pilot will position the helicopter to one side of the moving ship and get a feel for the relative motion and then quickly move into position and put down swiftly. This is hazardous and not always predictable. At night the dangers are increased. These problems are substantially reduced by the use of a high frequency radio transmitter and dual receivers as a means of detecting the height and positional attitude of the helicopter above the landing platform (Fig. 1).

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L18: Entry 2 of 4

File: DWPI

Jan 22, 1997

DERWENT-ACC-NO: 1997-089199

DERWENT-WEEK: 199713

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**TITLE:** Ship stabiliser esp. to control pitching - has bow-mounted lateral hydroplanes, rotatable about transverse axis by controller responding to acceleration, angular speed, roll, and pitch sensors

INVENTOR: BERNE, J

PATENT-ASSIGNEE: SOC NOUV ATELIERS &amp; CHANTIERS DU HAVRE (CHANN)

PRIORITY-DATA: 1995FR-0008856 (July 21, 1995)

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**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> EP 754618 A1	January 22, 1997	F	010	B63B039/06
<input type="checkbox"/> FR 2736888 A1	January 24, 1997		000	B63B039/06

DESIGNATED-STATES: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

CITED-DOCUMENTS: 1. Jnl. Ref; DE 2013048 ; GB 799795 ; GB 825134 ; GB 881681 ; GB 999306 ; US 1800365 ; US 4776294 ; US 5033694 ; US 5235926 ; US 5511504 ; WO 9212046

**APPLICATION-DATA:**

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
EP 754618A1	July 15, 1996	1996EP-0401562	
FR 2736888A1	July 21, 1995	1995FR-0008856	

INT-CL (IPC): B63B 39/06

ABSTRACTED-PUB-NO: EP 754618A

**BASIC-ABSTRACT:**

The stabiliser includes hydroplanes (2a, 2b) which project on horizontal, or downward inclined axes from bearings mounted in the submerged bow bulb. To control pitching only, a controller, reacting to sensor signals, applies common angles of incidence via a hydraulic or electrical actuator. The surfaces are e.g mounted on the same transverse shaft.

The equipment may additionally counteract rolling, with independently operated control surfaces given opposing angles of incidence. The bulb compartment (3) can

be divided centrally, with hydroplane assemblies swivelling on vertical axes (ZZ') independently retractable in fair weather or for berthing (2b). On striking a submerged obstacle, an assembly, latched (13a, 14a, 15a) when extended, is freed (13b, 14b, 15b) and retracts (12b). Single or paired auxiliary trailing edge surfaces (6) optimise water flow and thrust.

USE/ADVANTAGE - Esp. in merchant or naval vessels 50-250 m long. Allows to simultaneously correct pitching and pounding.

ABSTRACTED-PUB-NO: EP 754618A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.10/18

DERWENT-CLASS: Q24 W06

EPI-CODES: W06-C01A5;

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L18: Entry 3 of 4

File: DWPI

Apr 30, 1996

DERWENT-ACC-NO: 1996-229392

DERWENT-WEEK: 199624

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TITLE: Computer controlled fins to improve seakeeping in marine vessels e.g. SWATH type vessels - use roll and pitch, angle and rate sensors to send signals to control fins so they counteract roll and pitch, with accelerometers allowing for counteract of heave and vertical movement

INVENTOR: MARTIN, J R

PATENT-ASSIGNEE: MARTIN J R (MARTI)

PRIORITY-DATA: 1995US-0512990 (August 9, 1995)

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## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <a href="#">US 5511504 A</a>	April 30, 1996		009	B63B001/10

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US 5511504A	August 9, 1995	1995US-0512990	

INT-CL (IPC): B63B 1/10

ABSTRACTED-PUB-NO: US 5511504A

## BASIC-ABSTRACT:

The computer controlled fins are mounted on the pontoons of the vessel. The control system includes roll angle and pitch angle sensors, with roll rate and pitch rate sensors for developing damping signals, with all the signals used to control the control fins to counteract roll and pitch. In addition, individual accelerometers are mounted to the vessel at different locations to sense vertical acceleration of the vessel. These signals control the control fins to provide improved control of roll and pitch, and also to counteract any heave or vertical movement of the vessel.

Additionally, draft sensors are mounted to the vessel to generate draft or depth of immersion signals. These signals override the roll, pitch and heave signals to cause vertical movement of the vessel to counteract incipient slamming or broaching of the vessel.

ADVANTAGE - The roll and pitch angle and rate sensors together with accelerometers and draft sensors provide a highly controlled and stable system for this type of vessel.

ABSTRACTED-PUB-NO: US 5511504A  
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg. 1/3

DERWENT-CLASS: Q24 W06  
EPI-CODES: W06-C01A5;

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L18: Entry 4 of 4

File: DWPI

Aug 4, 1995

DERWENT-ACC-NO: 1995-376002

DERWENT-WEEK: 200129

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TITLE: Marine vessel antenna for communication with geostationary satellite - has revolution control part which rotates antenna in AZ axis according to information from infra-red disturbance sensor to compensate for pitch and roll motion of vessel

PATENT-ASSIGNEE: ANRITSU CORP (ANRI)

PRIORITY-DATA: 1993JP-0351728 (December 28, 1993)

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> <u>JP 07202544 A</u>	August 4, 1995		005	H01Q003/08
<input type="checkbox"/> <u>JP 3165310 B2</u>	May 14, 2001		005	H01Q003/08

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 07202544A	December 28, 1993	1993JP-0351728	
JP 3165310B2	December 28, 1993	1993JP-0351728	
JP 3165310B2		JP 7202544	Previous Publ.

INT-CL (IPC): H01Q 1/18; H01Q 1/34; H01Q 3/08

ABSTRACTED-PUB-NO: JP 07202544A

BASIC-ABSTRACT:

The antenna has an emission part (3) fixed to whose rotation is controlled along the EL axis. A sensor (6) detects the agitation of the vessel. A transmission part uses IR ray to transmit the edited signal from the sensor to an antenna control circuit (10).

The antenna control unit computes the AZ axis rotation angle whose AZ axis is along the emission part inclination direction from the value of the sensor and the angle of elevation of the EL axis is obtained from the transmission part. The antenna control circuit controls a revolution control part (9) which sets AZ axis at particular angle.

ADVANTAGE - Reduces noise. Fast, accurate control. Reduces wear on contacts.

ABSTRACTED-PUB-NO: JP 07202544A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg. 1/8

DERWENT-CLASS: W02 W06

EPI-CODES: W02-B06A; W02-B07A7; W02-B08F2; W02-C03B1C; W02-C03C3C; W06-C01B7;

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